DOCUMENT RESUME

ED 288 660 RC 016 373

AUTHOR Endeley, Joyce B.
TITLE Women Farmers' Perceptions of the Economic Problems Influencing Their Productivity in Agricultural Systems: Meme Division of the Southwest Province, Cameroon.
PUB DATE Apr 87
NOTE 16p.; Paper presented at the Annual Meeting of the Association for International Agricultural Education (3rd, Chevy Chase, MD, April 24-26, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Access to Education; *Access to Information; *Adult Farmer Education; *Agricultural Production; Economic Factors; Educationally Disadvantaged; *Farmers; *Females; Financial Support; Foreign Countries; Productivity; Rural Economics; Self Concept
IDENTIFIERS *Cameroon; *Economic Equity; Resource Management

ABSTRACT

Women farmers produce about 60% of the food in Cameroon, but face more problems and constraints than men in performing their agricultural activities. Cash crop farmers (mostly men) are the targeted beneficiaries of government and international aids, and have better access to extension services, loans, subsidized production input (herbicides, pesticides, and fertilizer), land, better farm tools, and an organized market structure. The lack of, or inadequate access to, these production resources explain why women farmers' agricultural productivity is lower than men's. The study provides empirical evidence on the economic problems that influence women farmers' productivity in seven selected villages of Meme Division, Cameroon. Two hundred ninety-five women farmers were interviewed face-to-face. Data were collected on the perceived level of access to different production resources and the personal characteristics of women farmers. Factors which seemed to have constrained access to production resources included lack of awareness, lack of technical know-how, and insufficient funds. The women perceived that they had access to land, labor, and infrastructure, but lacked access to formal agricultural training programs (although they thought this would have the least influence on their productivity). Recommendations for future research conclude the paper. (JMM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED288660

WOMEN FARMERS' PERCEPTIONS OF THE ECONOMIC PROBLEMS INFLUENCING THEIR PRODUCTIVITY IN AGRICULTURAL SYSTEMS: MEME DIVISION OF THE SOUTHWEST PROVINCE, CAMEROON

Presentation for AIAE Seminar

April 24-26, 1987

Joyce B. Endeley
Department of Agricultural Education
The Ohio State University
204 Agricultural Administration Building
2120 Fyffe Road
Columbus, Ohio 43210

RC016373

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Joyce B. Endeley

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

INTRODUCTION

Despite all the efforts and resources being utilized to develop agriculture, governmental and international agencies have failed in ensuring "that people at all times have both physical and economic access to the basic food they need" (FAO, 1984), which is the goal of the concept of food security.

According to the Fifth Five-Year Development Plan (1981-1986), the Cameroon government is planning to attain self-sufficiency in food supply by the year 2000. The government recognizes that efforts have to be made to strengthen the capacity of agricultural institutions, improve the ability of agricultural educators as well as the farm clientele if the goal of food self-sufficiency is to be attained. Increased attention and effort has to be made in addressing women's integration into the agricultural development process because they produce about 60% of the food in Cameroon.

The literature on Cameroon highlights the fact that women farmers face more problems and constraints in performing their agricultural activities than men. Reviewed related literature showed that cash crop farmers (mostly men) are the targeted beneficiaries of government and international aids. They seem to have better access to agricultural extension services, credit (loans; subsidized production input such as fertilizer, herbicide, pesticide; land; better farm tools; organized market structure [Kelso, 1983; Guyer, 1977; Bryson, 1979; Nji, 1978]). Studies have shown that the lack of or inadequate access to these production resources explains why women farmers' productivity level in agriculture tend to be lower compared with men (Boserup, 1970; Moock, 1976; Fortmann, 1977). According to Blumberg (1981), productivity is a function of access and use of production inputs.

Another very important problem for agricultural educators and planners, who are responsible for developing human resources and programs in agriculture, is the lack of current data on farmers' perceptions of their problems and needs. This is a critical factor in the development of any effective program or project. According to the World Bank Draft Report (1984), most technical programs and projects for farmers have been based on an outside view of what are believed to be farmers' problems, needs or wants.

An awareness of the problems faced by women farmers in agriculture would be invaluable to planners of agricultural development programs, educators, and the government to better meet the needs of women farmers and its goal of food self-sufficiency.

PURPOSE AND OBJECTIVES

The purpose of this study was to provide empirical evidence on the economic problems that influence women farmers' productivity in agriculture in seven selected villages of Meme Division, Cameroon.

The specific objectives were:

1. To describe women farmers' perceived economic problems in terms of their access to land, labor, farm tools, agricultural inputs, household technology, credit, agricultural training, and infrastructure.

2. To rank the difficulty of accessing the following production resources; land, labor, farm tools, production inputs, household technology, credit, agricultural training, and infrastructure as they influence women farmers' productivity.

3. To describe women farmers in terms of types of farmer and the production resources they use in performing their farm activities.

4. To describe the demographic characteristics of women farmers in terms of age, marital status, head of household, number of children, size of household, level of education, income generating activities, and income level.

5. To describe the relationship between access to credit, access to land, labor, improved farm tools, agricultural production input, household technology, agricultural training programs, and infrastructure.

6. To describe the relationship between types of farmers, head of household status, age, level of education, size of household, income level, and the variables of perceived economic problems.

7. To determine whether significant differences exist between groups based on: head of household, marital status and types of farmers and perceived economic problems.

METHODOLOGY

The study was a descriptive correlational study. It did not establish cause-and-effect relationships between variables. The researcher described, identified and explained relationships and differences between variables (characteristics).

Population and Sample

The sites of this investigation were seven selected villages in Meme Division, Cameroon. A list of women farmers was compiled for each of the seven selected villages by the investigator and women leaders in each village. At the time of this study, no comprehensive list of women farmers was available with any of the agricultural institutions or village organizations. A total of 981 women farmers in seven selected villages constituted the population of the study. From each of the developed village lists of women farmers, proportionate and systematic random sampling procedures were utilized in selecting respondents

for the sample. The total sample size for the study consisted of 296 randomly selected women farmers in seven selected villages.

Instrumentation and Data Collection

A two-part instrument was developed by the investigator to collect data for this study. No suitable instrument was found that could generate the information necessary to attain the objectives of this study. Part I of the instrument collected data to describe the farm activities of and production resources currently used by women farmers, and measured women farmers' perceived level of access to different production resources. Part II of the instrument collected data to describe the personal characteristics of women farmers in this study. A free space was also provided in Part II of the instrument for the women farmers to provide additional comments on other factors influencing their productivity in agriculture not included in the instrument.

The instrument was reviewed by a panel of experts to establish content validity. The panel of experts consisted of the doctoral advisory committee for the researcher at Ohio State University, and personnel in the department of community development who are involved with women's agricultural activities in Cameroon. The instrument was also pilot-tested for reliability, suitability and to field-test the data collection procedures.

Women farmers in the sample were interviewed by carefully selected and trained female interviewers using a face-to-face interview technique. The interviews were completed in about eight weeks.

Data Analysis

The data were then edited, coded, put on a disc and processed using the Statistical Package for the Social Sciences (SPSSX). Descriptive statistics were used to describe and summarize the women farmers' perceived economic

problems, farm and non-farm activities, and personal characteristics. Correlation coefficients were calculated to describe the strength and direction of the relationships between personal characteristics of women farmers and their perceived economic problems, and intercorrelations among variables of perceived economic problems.

Analysis of variance was used to determine the differences between groups based on head of household, type of farmer, marital status and perceived economic problems. An alpha level of 0.05 was set a priori.

RESULTS

The analysis reported was based on 295 usable responses from women farmers in this study. Due to time constraints, only major and relevant educational findings have been selected and reported in this paper.

Perceived Economic Problems

The data presented in Table 1 describes women farmers level of agreement to statements describing their perceived access to each of the eight production resource factors that were investigated in this study. The mean scores less than 2.50 indicated that most women farmers perceive that they have access to land, labor and infrastructure (which includes storage, transportation and market facilities). The mean scores 2.50 and above showed that women farmers disagreed with having or lacked access to improved farm tools, agricultural production inputs, training programs and credit, and household technology.

The factors which seemed to have constrained women farmers' access to these production resources in this study includes the following:

- Lack of awareness about the existence of specific production resources or innovations.

- Lack of awareness about the existence of agricultural institutions such as the agricultural extension services, and FONADER credit institutions which provide services to farmers.
- Lack of technical know-how in using available production input such as insecticide, fertilizer or acquiring credit.
- Insufficient funds to buy needed production resources even without the other constraints.

The mean scores for these items were greater than 2.50.

Access to Agricultural Training Program

Specific item mean scores describing women farmers' perceived level of access to agricultural training indicated that most women farmers are neither aware of nor have attended agricultural training programs. The women farmers also agreed that they do not know where to obtain needed agricultural technical information. The respective mean scores are 2.77, 3.36 and 3.18. Most women farmers believe that it is their level of education rather than the sex of the agent that might prevent them from attending training programs. The respective mean scores are 2.76 and 1.84. Less than one-half (41%) of the women farmers disagreed with the statement that only men are informed about training programs (mean score was 2.22). These are factors reported in the literature which are known or tend to limit women farmers' access to agricultural training programs (scale is similar as in Table 1).

Table 1

Overall Mean Scores and Standard Deviations Describing Women Farmers' Perceived Agreement to Statement Describing Their Access to Production Resources

Access to Production Resource	Mean	S D
Land	2.27	0.61
Labor	2.41	0.51
Improved Farm Tool	3.05	0.45
Production Input	2.82	0.64
Household Technology	2.79	0.48
Credit	2.85	0.50
Agricultural Training Programs	2.74	0.60
Infrastructure	2.25	0.47

NOTE: Scale: 100-1.49 = Strongly Agree; 1.50-2.49 = Agree; 2.50-3.49 = Disagreed; 3.50-4.00 = Strongly Disagreed

Other Relevant Educational Findings

Of the 17% of women farmers who reported that they have attended an agricultural training program, 12.0% attended programs conducted by the home economics and young farmers organization, and 2.1% had attended extension programs.

Only 19% of the women farmers reported that they were visited by an extension agent in 1985, with most of the women being visited one to two times. About 58% of the women farmers have no formal education, 40% have some primary level of education, and 2% had secondary education.

Influence of Perceived Economic Problems on Women Farmers' Productivity

The women farmers were asked to rate the difficulties in accessing ten production resources and how each influenced their productivity in agriculture. The difficulties in accessing improved farm tools, credit, agricultural production inputs and labor were perceived by most women farmers as having the greatest influence on their productivity. Difficulty in accessing agricultural

training program was ranked lowest and perceived by the women farmers to have the least influence on their productivity. Refer to Table 2 for mean scores.

Table 2

Means and Ranks of the Difficulties in Accessing Production Resources as They Influence Productivity by Women Farmers

Production Resources	Mean	Rank	n
Improved Farm Tool	3.32	1st	294
Credit	3.43	2nd	294
Agricultural Input	4.07	3rd	293
Labor	4.77	4th	294
Transportation	4.96	5th	249
Storage Facility	6.58	6th	293
Household Technology	6.58	6th	293
Land	6.59	7th	290
Market	7.22	8th	293
Agricultural Training Program	7.38	9th	294

NOTE: Scale: 1 = production resource with greatest influence on productivity; 2 = ----------; 10 = production resource with least influence on productivity.

Level of Education and Perceived Level of Access to Production Resources

Kendall tau C correlation coefficient indicated low relationships between level of education and women farmers' perceived level of access to land ($r = -.14$); production input ($r = -.28$); household technology ($r = -.11$); credit ($r = -.28$); training program ($r = -.25$); and infrastructure ($r = -.28$). These low relationships indicated that women farmers with higher level of education more frequently agree with having access to these production resources.

Demographic Characteristics and Perceived Level of Access to Agricultural Training Programs

The characteristic income level was found to have low relationship ($r = -.12$) with perceived level of access to agricultural training program. This correlation-coefficient indicate that women farmers with income greater than 25,000 cfrs more frequently agree with having access to agricultural training programs. All other demographic characteristics had negligible relationships.

The intercorrelation coefficients indicated that perceived level of access to agricultural training program had meaningful relationships with perceived level of access to all other production resources except improved farm tool. The relationships were low ($r = .21$ to $.29$) or substantial ($r = .52$).

The women farmers, whether by groups based on type of farmer, marital or head of household status disagreed with having access to production resources. The mean scores were above 2.50. However, analysis of variance and a post-hoc test indicated a significant difference at 0.05 level between food, and food and cash crop farmers on their level of disagreement with having access to production resources. This finding indicates that food crop farmers may have more difficulties in accessing production resources than food and cash crop farmers.

Farm Activities and Some Demographic Characteristics

Sixty-six percent of the women farmers are involved in food and cash crop farming. Seventy percent of the crops grown by women farmers are for home and market consumption. Fifty-one percent of the women farmers reported that they own at least one piece of the land they cultivate. The production resources utilized by women farmers are as follows: 99% use hoes; 80% use cutlasses; 62%

use axes; 95% use traditional seed varieties; 50% have carts; 42% use manure; and 59% make use of informal credit sources.

All the women were engaged in agriculture, 59% in petty trading, and 10% in other income generating activities investigated in this study.

The mean age of the women farmers was 38 years. Most of the women farmers (about 70%) were married and non-heads of households.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are based on the findings presented in this study:

1. Women farmers perceive that they have access to land, labor and infrastructure but lacked access to improved farm tools, agricultural production inputs, credit and training programs, and household technology.

2. Factors which seem to constrain women farmers' access to most production resources includes:

- Lack of awareness about the existence or use of available production resources.
- Lack of awareness about public agricultural institutions meant to provide the farm community with agricultural production information and services.
- Insufficient money to buy needed production resources even when they are available.

Other educational conclusions includes the following:

- Women farmers believe that it is their educational level rather than the sex of the agricultural extension agent which might prevent their attendance of agricultural training programs. Most women farmers had no formal education.

- There was very little contact between the women farmers and agricultural agents.
- More women farmers have attended training programs organized by the home economic and young farmers organizations than extension service programs.
- The women farmers perceive that they do not have sources for obtaining technical agricultural information. Traditional techniques and technologies predominate women farmers' production system.
- The women farmers were generally both food and cash crop farmers who produce crops for home and market consumption. Farming and petty trading are the major income generating activities of the women.
- Level of education was related to women farmers' perceived level of access to land, production input, household technology, credit, training programs and infrastructure.
- Income level was also related to perceived level of access to agricultural training programs. Perceived level of access to agricultural training program was related to the level of access to all the other production resources except improved farm tools.

3. The problems perceived by women farmers as having the greatest influence on their productivity in agriculture includes the difficulties in gaining access to improved farm tools, credit, production inputs and labor. Difficulties in gaining access to agriculture was perceived to have the least influence.

4. The women farmers, whether by groups based on type of farmer, marital or head of household status, do not have access to production resources or differ in their level of perceived economic problems. However, food crop farmers may have more difficulties in accessing production resources than food and cash crop farmers.

Educational Implication

Despite the fact that women farmers perceive that accessing agricultural training programs will have the least influence on their productivity, findings show that effective use of production resources require some agricultural education. This is a situation where an unrecognized problem exists. It is not surprising because women farmers in Cameroon have been able to meet up with increasing food demand in the past without any form of agricultural education. Their production has depended very much on the availability of land and labor. But present trends and changes within the system might not be able to support this form of production, thus, the need for some education of farmers in production techniques.

The challenges for agricultural educators are: (1) how to make women farmers in this study feel the need and realize the importance of accessing agricultural training programs in helping them solve their production problems; (2) to develop an appropriate teaching method realizing the fact that most of the women farmers are illiterate, and (3) make women farmers realize that they do not have to be educated to benefit from available agricultural training programs.

Recommendations for the Women Farmers in this Study

The women farmers need to have sufficient access to production resources if they are to increase their level of productivity in agriculture. This recommendation will require that:

1. Agricultural institutions which includes financial institutions (such as FONADER), extension services, CENEEMA, Nidevive and institutions of agronomic research make efforts to provide information and educate the women farmers on:

a. the services provided by these institutions to farmers

b. the importance of their services to women's agricultural activities

c. how and where farmers can obtain services and/or improved technology.

2. The agricultural extension services should become more involved with women farmers' production activities, especially in food crop production, because the women farmers are not only eager to learn but have not benefited from previous agricultural extension efforts.

Recommendations for Future Research

1. Further research needs to be conducted to determine what technological packages will be more economical for the women farmers to adopt in solving their production problems, particularly those relating to lack of improved farm technology, credit, agricultural production inputs and labor.

2. Study the constraint and/or reason why the services of agricultural and related institutions have failed to reach the women farmers in this study.

3. This study should be replicated with women farmers in other regions of Cameroon to determine if other women farmers face similar problems in agriculture as in this study.

4. Additional research should be conducted with men and women farmers to determine and compare if both sexes face similar problems in accessing production resources.

5. Additional research should be conducted to describe the quality and size of land that women farmers own.

BIBLIOGRAPHY

Blaxter, K. (1986). People, food and resources. Cambridge, London: Cambridge University Press, pp. 59-60.

Blumberg, L. R. (1981). Females, farming and food: Rural development and women's participation in agricultural production systems. In Lewis, B.C. (Ed.), Invincible farmers: Women and the crisis in agricultural development. Monograph. Washington, DC: Agency for International Development, pp. 45-56.

Boserup, E. (1970). Women's role in economic development. New York: St. Martin Press.

Bryson, C. J. (1979). Women and economic development in Cameroon. Prepared for USAID/Yaounde, Cameroon.

F.A.O. (1984). Summary FAO Report. Unpublished draft, working paper, Yaounde, Cameroon.

Fortmann, L. (1978). Women and Tanzanian agricultural development. Economic Bureau 77.4. Tanzania: University of Dar Es Salaam.

Guyer, J. (1977). The women's farming system, the Lekie Southern Cameroon. E.M.S.A., Yaounde, Cameroon.

Kelso, F. B. (1983, December). Study of the food crops component of the Cameroon Extension program and the feasibility of establishing technical support centers. USAID, Yaounde.

Ministry of Economic Affairs and Planning (1981). The fifth five-year economic, social and cultural development plan 1981-1986. United Republic of Cameroon.

Moock, P. R. (1976). The efficiency of women as farm managers: Kenya. In American Journal of Agricultural Economics, 56(5).

Nji, A. (1978). Description of the functions of agricultural technician working with C.D. Department. Minagri, Community Development Department, Women's Agricultural Service, Yaounde, Cameroon.

World Bank (1984). Cameroon rural extension and training: A working paper. Informal draft. Western African Regional Office. Agricultural D, World Bank.